

CALL FOR PAPERS

Special Issue on Machine Learning and Deep Learning Models for Fog and Mobile Edge Computing and Intelligent Systems

Aim and Scope

Machine learning provides systems the ability to automatically learn and improve from experience without being explicitly programmed. It focuses on the development of computer programs that can access data and use it learn for themselves. On the other hand, deep learning is a model with a multi-level layer structure that uses the underlying output as input from the top. From down to top is a process of unsupervised learning, which automatically learns useful features, and expresses the low-level features as advanced features. Moreover, from top to bottom is a process of supervised learning which has the characteristics of better learning ability through labeled data. Deep learning has developed rapidly in recent years mainly due to the following two reasons. (1) The application of massive tagged data mitigates the problem of training. In deep learning, the data is "engine", and Imagenet has millions of annotated data. (2) The rapid development of computer hardware provides a commanding computing power which makes it possible to train large-scale neural networks, for example high-performance GPU can integrate thousands of cores. Deep learning models have proven to be an efficient solution to the most complex engineering challenges. At the same time, security, privacy and management of data in fog and mobile edge computing (FMEC) and intelligent systems is nowadays one of the serious concerns. Therefore, it is expected that the development of machine learning and deep learning based solutions can play an important role to ensure security, privacy and management of data in fog and mobile edge computing (FMEC) and intelligent systems.

This special issue mainly focuses on machine learning and deep learning based solutions for fog and mobile edge computing (FMEC) and intelligent systems, addressing both original algorithmic development and new applications. We are soliciting original contributions of leading researchers and practitioners from academia as well as industry, which address a wide range of theoretical and application issues in this domain.

Topics of Interest

The topics relevant to this special issue include but are not limited to:

- Machine learning and deep learning for information revelation and privacy in FMEC
- Machine learning and deep learning for industrial system in FMEC
- Machine learning and deep learning for security protocols in fog and mobile edge computing
- Machine learning and deep learning for FMEC modelling and security issues
- Machine learning and deep learning for security, privacy and management of multimedia data in FMEC
- Machine learning and deep learning to gain novel insights on FMEC security analysis
- FMEC and deep learning concepts and applications
- Machine learning and deep learning algorithms for learning the behavior analysis in FMEC
- Machine learning and deep learning for dynamic processes in FMEC
- Machine learning and deep learning for multimedia data management in fog computing
- Machine learning and deep learning for intelligent systems

- Machine learning and deep learning for complex systems
- Machine learning and deep learning for X-systems
- Machine learning and deep learning for sensor networks and intelligent systems

Important Dates

Manuscripts Due Date: October 30, 2020

First Decision Date: January 30, 2021

Revision Due: March 15, 2021

Final Decision Date: April 30, 2021

Final Paper Due: Q3/Q4, 2021

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Submission Instructions

Paper submissions for this special issue should follow the submission format and guidelines for regular papers at the Journal of High Speed Networks website:

<https://www.iospress.nl/journal/journal-of-high-speed-networks/>

Papers should be original and fully in topic with the special issue. Each paper extending a previously published conference paper or preliminary version should add a significant new contribution and cite its previous version while clearly describing the main difference between the two versions.

Authors' manuscripts should be submitted online to the journal's editorial management system: <http://mstracker.com/submit1.php?jc=jhsn>

Authors have to specify that the manuscript is for the “Machine Learning and Deep Learning Models for Fog and Mobile Edge Computing (FMEC) and Intelligent Systems” special issue. This can be done by inserting a proper note within the manuscript or in the cover letter.